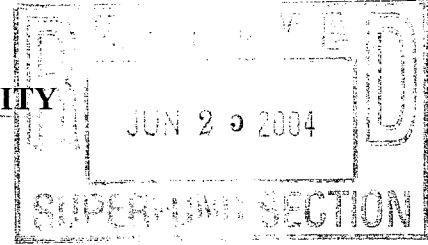


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~~DIVISION OF WATER QUALITY~~

Groundwater Section  
June 24, 2004



**MEMORANDUM**

**TO:** Randy McElven

**THROUGH:** Charles Stehman *CS*

**FROM:** Diane Adams *CPA*.

**SUBJECT:** Comments - Final Site 94 Phase I Sample Strategy Plan  
Operable Unit No. 18 (Site 94)  
Marine Corps Base Camp Lejuene  
Onslow County

**Site Summary**

Site 94 is located within the Hadnot Point Industrial Area of Camp Lejuene in the southern part of OU1, Site 78. This site is located at the PCX Service Station identified as building 1613. Building 1613 is currently an active facility which provides fuel for private vehicles and also a snack shop. There are two fuel pumps on each of two islands adjacent to the building, and three above ground storage tanks (ASTs) located in a fenced area north of the building. Several investigations have been performed at this site in the past. In the 1950s the site had two 10,000 gallon and two 30,000 gallon underground storage tanks (USTs), which contained various grades of gasoline. In 1995 a UST closure report was submitted and confirmed hydrocarbon impact to the surrounding soils. In addition, chlorinated organic contaminants were found, but the source has not been identified. A groundwater investigation was conducted in September of 2000 and found that six monitoring wells had VOC (BTEX and MTBE) concentrations above State 2L standards. Two wells had PAH concentrations above the standards. In September 2003 a groundwater sampling event was conducted to obtain current groundwater data. Twenty two wells from site 94 and 3 wells from site 78 were sampled. TCE was found in three wells (UST1613-MW13, -MW-14, and -MW-15). TCE, methylene chloride, and acetone were detected in shallow wells, with only acetone being above state standards in one well.

This report outlines proposed groundwater sampling activities at the subject site. All previous investigative materials will be reviewed to help identify potential sources of contamination and also to evaluate the extent of contamination. Approximately 20 DPT borings are proposed to help identify the horizontal and vertical extent of contamination. Fifteen points have been initially located using a main transect line with cross transects (map attached). It is proposed that groundwater will be analyzed on site for VOCs at two intervals at each of the

borings (30 and 50 feet bgs). The purpose of the DPT investigation is to identify a source area. Following the DPT investigation approximately 20 new intermediate and deep monitoring wells will be installed at site 94. The wells will be constructed 45-50 feet for the intermediate wells, and to a depth of approximately 75 feet for the deep wells. Water level data will be collected from all existing wells (22 at site 94 and 3 from site 78) and from the 20 new wells. Groundwater samples will be collected from the 3 existing intermediate wells at site 94 and the twenty new wells. The wells will be sampled for TCL VOCs (EPA SW846 Method 8260B), TCL SVOCs (EPA SW846 Method 8270C), TAL Metals EPA SW846 Method 6010B/700 series and natural attenuation parameters by various methods.

**Groundwater Section Comments:**

The Groundwater Section is in agreement with the proposed sampling plan. Based on the maps provided, the placement of the DPT locations seems appropriate.

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